

**Amendment and Response**

Applicant: Jung Pill Kim

Serial No.: 10/672,246

Filed: September 25, 2003

Docket No.: I436.101.101/IO030905PUS

Title: TEMPERATURE SENSOR SCHEME

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**REMARKS**

The following remarks are made in response to the Office Action mailed December 14, 2004. Claims 1, 3-5, and 15-17 have been allowed. Claims 6-9, 11-14, 18, and 19 were rejected. Claims 2, 10, and 13 have been objected to. With this Response, claims 2, 6-8, and 18 have been amended. Claim 20 has been added. Claims 1-20 remain pending in the application and are presented for reconsideration and allowance.

**Claim Objections**

The Examiner objected to claims 2, 7, 8, and 18 because of informalities to the claims.

Applicant have respectfully amended the claims suggested by the Examiner and believe the claims are now in condition for allowance.

**Claim Rejections under 35 U.S.C. § 103**

The Examiner has rejected claims 6-9, 11, 13, 18, and 19 under 35 U.S.C. § 103(a) as being obvious over Chesnut et al. U.S. Patent No. 4,302,663. The Chesnut et al. reference discloses a control system for a space heater. The reference discloses a first heater 12 and a second heater 14, and the control system includes a temperature sensor 82, a first comparator 84 and a second comparator 94. As indicated in the Chesnut et al. reference, when the temperature of sensor 82 falls below a certain value, then the output of first comparator 84 becomes high and a first heater 12 is activated. When the temperature of sensor 82 is more than a minimum distance below the desired value, however, then the second heater 14 is activated. At no point, however, does the Chesnut et al. reference teach or disclose a temperature range being determined. The control system taught in the Chesnut et al. reference simply compares the sense temperature to a desired value in order to begin heating when the sense temperature is below a particular value. The reference neither teaches nor suggests determining a particular temperature range between which a sensed value may fall.

Claims 6 and 18, as amended, each compare a first reference voltage to a sense voltage and compare a second reference voltage to a sense voltage that are each different from each other. In this way, a determination is performed such that the sensed temperature is in a range

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defined by the first reference voltage and the second reference voltage. Support for this amendment can be found on page 6, line 1; page 6, line 16; page 6, line 31-page 7, line 1; page 7, lines 16-17; and in Figure 3. Since no such range is taught or suggested anywhere in the Chesnut et al. reference, claims 6 and 18 are not obvious over Chesnut et al.

Since dependent claims 7-14 and claim 19 are dependent on independent claims 6 and 18, they are also not obvious in view of Chesnut et al. for the same reason. Therefore, Applicant respectfully requests reconsideration and withdrawal of 35 U.S.C. § 103 rejection to claims 6-9, 11, 13, 18, and 19 and request allowance of these claims.

Finally, the Examiner rejected claim 12 under 35 U.S.C. § 103(b) as being unpatentable over Chesnut et al. U.S. Patent No. 4,302,663 in view of Bradenbaugh U.S. Patent No. 6,455,820, and rejected claim 14 under 35 U.S.C. § 103(a) as being unpatentable over Chesnut et al. U.S. Patent No. 4,302,663 in view of Simcoe et al. U.S. Patent No. 4,228,511. Since claims 12 and 14 are dependent on claim 6, which is now believed to be in condition for allowance, claims 12 and 14 are now also in proper condition. Therefore, Applicant respectfully requests reconsideration and withdrawal of the 35 U.S.C. § 103(b) rejection to claims 12 and 14, and requests allowance of these claims.

**New Claim 20**

With this amendment, Applicant has added claim 20. Claim 20 is believed to be in condition for allowance. Claim 20 specifies a random access memory device that includes a first temperature reference circuit having a plurality of first reference voltages, as well as a second temperature reference circuit having a plurality of second reference voltages. Each temperature reference circuit has a trimmer that is independently adjustable to allow adjustment of the plurality of first and second reference voltages.

The Examiner has expressly admitted that the Chesnut et al. reference fails to disclose a second temperature reference circuit having a trimmer allowing for independently adjusting the plurality of second reference voltages (see Office Action, page 3, final paragraph). The Examiner has not cited any art that teaches or suggests the addition of a second temperature reference network that is independently adjustable from the first temperature reference network.

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Such teaching or suggestion cannot simply come from Official Notice. As indicated in the Manual of Patent Examining Procedure “[o]fficial notice unsupported by documentary evidence should only be taken by the Examiner where the facts asserted to be well-known, or to be common knowledge in the art are capable of instant and unquestionable demonstration as being well-known.” M.P.E.P. § 2144.03(a). “It would not be appropriate for the Examiner to take official notice of facts without citing a prior art reference where the facts asserted to be well-known are not capable of instant and unquestionable demonstration as being well-known.” Id. (Emphasis Original).

Adding parts to a memory device is not an obvious design choice. Efficient and compact random access memory devices are required and one of ordinary skill in the art would know that design parameters mandate fewer components, not more components. In other words, the addition of a second temperature reference circuit is counter intuitive to most designers skilled in the art. Designers in this field are seeking to minimize circuit components not duplicate them. In this way, Chesnut et al., and the other art of record, does not teach or suggest claim 20. For this reason, it is believe that claim 20 is in condition for allowance.

**Allowable Subject Matter**

Claims 1, 3-5, and 15-17 are allowed.

**CONCLUSION**

In view of the above, Applicant respectfully submits that pending claims 1-20 are in form for allowance and are not taught or suggested by the cited references. Therefore, reconsideration and withdrawal of the rejections and allowance of claims 1-20 is respectfully requested.

Applicant hereby authorizes the Commissioner for Patents to charge Deposit Account No. 50-0471 in the amount of \$200.00 to cover the fees as set forth under 37 C.F.R. 1.16(b)(c).

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The Examiner is invited to contact the Applicant's representative at the below-listed telephone numbers to facilitate prosecution of this application.

Respectfully submitted,

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By his attorneys,

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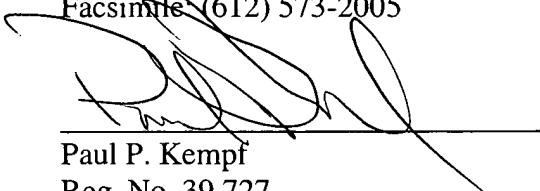
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**CERTIFICATE UNDER 37 C.F.R. 1.8:** The undersigned hereby certifies that this paper or papers, as described herein, are being deposited in the United States Postal Service, as first class mail, in an envelope address to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on this 7th day of March, 2005.

By 

Name: Paul P. Kempf